

50103-576/STL 3419

MAGNETIC RECORDING MEDIA WITH
CU-CONTAINING MAGNETIC LAYERS

ABSTRACT OF THE DISCLOSURE

A magnetic recording medium including at least one Cu-containing magnetic recording layer (CuML) comprised of a Cu-containing magnetic alloy material selected from the group consisting of:

5 (a) a CoCrPtBCu alloy having a composition represented by the formula $\text{Co}_{100-x-y-z-\alpha}\text{Cr}_x\text{Pt}_y\text{B}_z\text{Cu}_\alpha$, wherein $0 < x \leq ??$, $0 < y \leq 30$, $0 < z \leq 24$, $0 < \alpha \leq 10$, and $x + z \geq 35$;

(b) a CoCrPtBCu alloy having a composition represented by the formula $\text{Co}_{100-x-y-z-\alpha}\text{Cr}_x\text{Pt}_y\text{B}_z\text{Cu}_\alpha$, wherein $0 < x \leq 30$, $0 < y \leq 30$, $0 < z \leq 24$, $0 < \alpha \leq 10$, and $x + z \geq 35$; and

10 (c) a CoCrTaCu alloy having a composition represented by the formula $\text{Co}_{100-x-y-\alpha}\text{Cr}_x\text{Ta}_y\text{Cu}_\alpha$, containing less than 30 at. % Cr, up to 8 at. % Ta, and up to 10 at. % Cu.